

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 6

REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicant asserts that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 1-16 are pending in the application. Claim 1 has been objected to. Claims 1-16 have been rejected. Claims 1, 5, 15 and 16 have been voluntarily amended for clarification only. These amendments were not made in response to the cited prior art and do not narrow the scope of the claims. They are intended to more clearly express a limitation already present in the claims as filed.

Applicant respectfully asserts that the amendments to the claims add no new matter.

Claim Objections

In the Office Action, the Examiner objected to claim 1 because of alleged informalities. Claim 1 has been amended in order to cure these informalities. Accordingly, Applicant requests withdrawal of the objection.

CLAIM REJECTIONS

35 U.S.C. § 112 Rejections

In the Office Action, the Examiner rejected claims 1-4 under 35 U.S.C. § 112, second paragraph, because they allegedly fail to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner alleges

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 7

that the use of the term "cost/risk" in claim 1 is unclear. Applicant respectfully traverses this rejection in view of well established patent law which states that an inventor could be his own lexicographer. The term "cost/risk" in its exact form is fully defined and supported in Figures 2 and 3 and throughout the rest of the Specification (for example, see line 10 paragraph 27; line 2 paragraph 35; line 2 paragraph 36).

Therefore, Applicant respectfully asserts that claim 1 and claims 2-4, which depend from claim 1, are proper under 35 USC 112, and requests that the 112 rejection be withdrawn.

35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 1-16 under 35 U.S.C. § 103(a), as being unpatentable over "A Four step methodology for using simulation and optimization technologies in strategic supply chain planning" by Hicks, Proceedings of the 1999 Winter Simulation Conference, 1999 (hereinafter referred to as "Hicks"). Applicant respectfully traverses the rejection of claims 1-16 over Hicks. The Examiner has failed to establish a prima facie case of obviousness. More specifically, the Examiner has not shown any motivation or suggestion to modify the teachings of the cited reference to incorporate uncertainty in its supply chain optimization system. Although the Examiner has taken "official notice" that it would be obvious to include risk factoring in a system according to Hicks, the allegation to which official notice has been taken is contrary to the teachings of Hicks. In the interest of furthering the prosecution of the present application, however, Applicant has elected to amend claims 1, 5, 15 and 16 to further elaborate on the cost/risk/uncertainty feature which is a novel aspect of the claimed invention and which is neither taught nor suggested in the Hicks reference.

More specifically, claims 1, 5, 15 and 16 (after amendment) recite:

1. "A system for optimizing sourcing opportunity utilization policies, which specify sourcing opportunities over time and across the potential outcomes of one or more sources of uncertainty, comprising: a sourcing opportunity utilization policies engine configured for providing sourcing opportunity utilization ~~policies~~ policies; a cost/risk

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 8

generator configured for computing sourcing performance over time and across the potential outcomes of one or more sources of uncertainty by utilizing the sourcing opportunity utilization policies from the sourcing opportunity utilization policies engine; and an optimization engine configured for comparing the sourcing performance from the cost/risk generator to at least one objective for business performance over time and across potential ~~future circumstances~~ outcomes of one or more sources of uncertainty to determine an optimal sourcing opportunity utilization policy."

5. "A method for optimizing sourcing opportunity utilization policies, which specify sourcing opportunities over time and across the potential outcomes of one or more sources of uncertainty, comprising: receiving at least one objective for business performance over time and across potential ~~future circumstances~~ outcomes of one or more sources of uncertainty; defining a set of feasible sourcing opportunity utilization policies; utilizing the set of feasible sourcing opportunity utilization policies to perform sourcing performance analysis over time and across the potential outcomes of one or more sources of uncertainty; and evaluating sourcing performance analysis results to determine the optimal sourcing opportunity utilization policy."

15. "A machine readable medium having embodied thereon a program being executable by a machine to perform a method for optimizing sourcing opportunity utilization policies, which specify sourcing opportunities over time and across the potential outcomes of one or more sources of uncertainty, the method comprising: receiving at least one objective for business performance over time and across potential ~~future circumstances~~ outcomes of one or more sources of uncertainty; defining a set of feasible sourcing opportunity utilization policies; utilizing the set of feasible sourcing opportunity utilization policies to perform sourcing performance analysis over time and across the potential outcomes of one or more sources of uncertainty; and evaluating sourcing performance analysis results to determine the optimal sourcing opportunity utilization policy."

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 9

16. "A system for optimizing sourcing opportunity utilization policies, which specify sourcing opportunities over time and across the potential outcomes of one or more sources of uncertainty, comprising: means for receiving at least one objective for business performance over time and across potential ~~future circumstances~~ outcomes of one or more sources of uncertainty; means for defining a set of feasible sourcing opportunity utilization policies; means for utilizing the set of feasible sourcing opportunity utilization policies to perform sourcing performance analysis over time and across the potential outcomes of one or more sources of uncertainty; and means for evaluating sourcing performance analysis results to determine the optimal sourcing opportunity utilization policy."

Whereas, Hicks teaches:

"Supply chains are real world systems that transform raw materials and resources into end products that are consumed by customers. Supply chains encompass a series of steps that add value through time, place, and material transformation. Each manufacturer or distributor has some subset of the supply chain that it must manage and run profitably and efficiently to survive and grow. Decisions about how to plan a company's supply chain operations can be operational, tactical, or strategic. Strategic decisions are the most far-reaching and difficult to make. These decisions are characterized by complexity, interdependence, and uncertainty. Simulation and optimization modeling techniques are used to help make supply chain strategic decisions. The Four Step Methodology is a proposed approach to supply chain strategic planning that attempts to leverage the strength of multiple modeling techniques. Each step solves a different part of the master planning problem, using either optimization, simulation, or simulation-optimization. By using complementary modeling approaches together in the Four Step Methodology, the supply chain planner's activities and decisions can be greatly improved." (Abstract)

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 10

As shown above and admitted by the Examiner, the cited reference fails to disclose and claim the limitation of calculating risk in its proposed optimization technology. The Examiner tries to overcome the deficiency in the teachings of the cited reference, by filling in the gap with what he assumes would be a part of strategic decisions taken into account by Hicks. Therefore, Applicant respectfully asserts that the Examiner has failed to establish a prima facie case of obviousness, by failing to show a suggestion or motivation to modify the cited reference as to include the risk feature. Furthermore, Applicant respectfully asserts that the Examiner used impermissible hindsight to reconstruct the Applicant's invention by using the Applicant's structure as a template and selecting elements from the cited reference to fill the gaps (see *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991)).

Applicant respectfully asserts that an adequate consideration of the prior art cited by the Examiner as a whole, could not have been used to establish sufficient implicit teaching, motivation, or suggestion of the present invention.

In addition, Applicant respectfully asserts that even if the Examiner had shown suggestion or motivation to modify the cited reference, the modification would not have taught all the limitations of the present invention, namely the uncertainty feature. On the contrary, the Hicks reference, when read and understood in its entirety, teaches away from the use of uncertainty features and its modification to incorporate such features would produce an unfeasible system.

More specifically, on page 1216, Section 3, "Terms and Definitions", Hicks defines his use of the term simulation as:

"Simulation is a specific computer based modeling approach which uses a chain of cause and effect relationships to help the user build complex models from the ground up, one link at a time."

Consistent with this definition, at no point in his description of his Four Step process does Hicks describe how simulation may be used to incorporate uncertainty into his process.

Furthermore, on page 1219 Hicks states:

"...Step Four is not centered around randomness and its effects; rather, it is the evaluation of the results of changing some of the external "given" data assumptions."

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 11

Thus when Hicks states in the table on the bottom of page 1219 that an objective of Step Four is to “minimize risk of undesirable outcomes”, he does not refer to risk associated with the *outcomes of sources of uncertainty*, but instead to risk from improper or inaccurate assumptions made by the user in constructing the model.

On page 1219 Hicks states:

“...the candidate policies and policy parameters must be explicitly identified...” and “...the data set for the simulation being optimized must be complete and accurate. While Step Two can be performed reasonably well with an incomplete data set, in Step Three any missing data or incomplete costs will result in the algorithm being ‘tricked’ into recommending the wrong solution.”

However, Hicks does not teach how to complete any of these steps. Nor does Hicks teach how to determine whether they have been completed successfully, or to diagnose problems that may arise if they have not.

Similarly, Hicks does not teach how to structure the optimization problem, including objective function, constraints, and set of feasible solutions.

Finally, and most importantly, Hicks makes no mention of how uncertainty may be incorporated in the Step Three he teaches, nor in his Steps One, Two and Four. More specifically, the only time Hicks mentions uncertainty in the description of his Four Step process is in his description of Step Four, where he states: “In Steps Two and Three, random variance may have been introduced to produce more realistic approaches.” Hicks does not define random variance, nor describe how or where it may be incorporated in his analysis, or the process steps required to do so.

For the above stated reasons, the Applicant respectfully asserts that the Examiner has failed to establish a prima facie case of obviousness. Therefore, independent claims 1, 5, 15 and 16 are considered to be allowable. Dependent claims 2-4 and 6-14 are considered to be allowable through their dependency on allowable base claims 1 and 5.

In addition, the Examiner rejected claims 10-11 and 14 under 35 U.S.C. 103 (a) as being unpatentable over Hicks, in view of Huang et al (US 6,151,582). For the same reasons stated above, Applicant believes these claims to be allowable, both due to the failure of Hicks

APPLICANT(S): Blake Johnson
SERIAL NO.: 10/621,726
FILED: 07/17/2003
Page 12

to teach or suggest the uncertainty feature and because these claims are dependent upon base claim 5, which base claim is considered allowable.

In view of the foregoing amendments and remarks, the pending claims are considered to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fees associated with this paper to deposit account No. 50-3400.

Respectfully submitted,



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Eitan Law Group, LLP.